User Manual

Introduction

The Serial ATA II to PCI-Express NCQ Host Controller Card is a high performance,
server class storage interface device, which provides a multi-port SATA generation
II connectivity to minimize the host overhead and the host to device latency, and it
incorporates the lead edge latest NCQ hard disks. With this NCQ feature, the hard
disks perform more efficient, which means higher performance and longer lifetime
of the hard disks.

Features

- Support 1-lane (x1) PCI-Express with transfer rate 2.5Gb/s
- Compliant with PCI-Express 1.0a specification
- Support SATA II specification with transfer rate 3Gb/s
- Backward compatible to SATA 1.0a specification
- Support hard disks with Native Command Queue (NCQ)
- Capability to connect to a Port Multiplier with FIS based switching
- Hot plugging supported
- Support Raid 0,1
- Raid 10,5 are supported, if drivers are connected to a Port Multiplier
- Windows98 , 98SE, ME, 2000, XP, Vista supported

Before the installation of the controller card, let us make the following assumptions:
1.The end users must have the basic knowledge of installing an internal device
and its driver to a PC. If they are not sure about their abilities or have and queries,
please call their local dealers immediately, or find somebody who are experienced
and qualified or assistance
2.The computer has been properly installed with our supported Windows operating system
Installing the controller card into the computer
1. Turn off your computer and all external devices connect to it
2. Disconnect your computer from the power sources.
3. Open the computer case. Refer to your computer user manual for more details.
4. Find an available x1 PCI-Express slot and remove the slot bracket. Save the bracket screw for later use.
5. Align the controller card horizontally with respect to the slot and insert it into the
slot firmly and evenly. Take card not to force it into the slot. Once you have

1. Choose "**RAID0**" OR "**RAID1**" depending on your application
   RAID0=Striped; combine two hard disk into one
   RAID1=Mirrored; make a copy of one hard disk to another
2. Choose "**Auto configuration**" if you are not familiar with the settings of RAID operation.
3. Press "**Enter**" to choose the maximum size in the hard disk available or press Up and Down Arrows to alter the size in the hard disk to be configured as RAID function.
4. Press **Ctrl-E** to exit.

Install only ONE hard disk under a RAID supported BIOS

Caution: all data in the hard disks will be lost in the following procedures
1. Turn on the computer, the BIOS on the controller card is executed.
2. Press **Ctrl-S** or **F4** to enter into BIOS menu
3. Choose "**Create RAID set**" in the Main Menu.
4. Choose "**CONCATENATON**"
5. Select "1" for only one hard disk to be installed.
6. Press "Enter" if there is only one hard disk is installed or press UP and Down Arrows and then "**Enter**" to choose the physical drive to be set. Finally, press 'Y' to confirm.
7. Press **Ctrl-E** to exit.

Check for the status of the hard disks

1. Choose "**Logical Driver Info**" in the Main Menu of the BIOS.
2. Press Up and Down Arrows to choose the hard disks and read their status in the Logical Driver column.
3. Press "**Esc**" to exit to the Main Menu.

Installing Windows driver for the controller card

1. Turn on the computer
2. Once Windows is running, a new controller is detected.
3. When the Windows ask for its device driver, insert the Drivers & Utility CD into the CDROM (assuming drive D) and browse to the following path for the driver
   D: / silicon-Image/ SIL3132RAID/ windows, for BIOS with RAID function
   D: / silicon_Image/ sili3132/ Windows , for nor-RAID BIOS.

If the hard disks installed are blank, do not forget to set partition and format them before use.

If you are performing a new Windows NT, 4.0, 2000, XP, 2003 or Vista installation to a SATA hard drive attached to the Serial ATAII controller card.
1. Please copy all the directories and files in the "**floppy**" folder to the root directory of a floppy disk to create a pre-install disk for Win2K/WinXP/Win2003/WinXP /Vista.
2. Press "**F6**" for third party SCSI or driver installation at the beginning of the text mode installation. Insert the 1.44MB floppy diskette into the floppy drive. Press "**S**" when setup asks if you want to specify an additional device.
3. Press "**Enter**" to continue on with text mode setup.
4. Follow the setup instructions to complete installing windows NT 4.0,2000 ,XP , 2003 or Vista.